

REMARKS

Applicants respectfully request further examination and reconsideration in view of the amendments above and the arguments set forth fully below. Claims 1-27 were previously pending in this application. Within the Office Action, Claims 1-27 have been rejected. By the above amendments, Claim 27 has been amended. Accordingly, Claims 1-27 are currently pending.

Claim Amendments

By the above amendments, Claim 27 has been amended to include the limitation “producing a resultant stream output from the stream synchronizer using the initial portion of the content item; streaming an entire segment of the content item to the stream synchronizer via a stream buffer while the initial portion of the content item is streaming to the stream synchronizer from the temporary storage cache; synchronizing the streaming initial portion of the content item and the streaming entire segment of the content item within the stream synchronizer.” Support for this amendment is found in the Present Specification, at least at page 21, line 12 to page 22, line 8.

Rejections Under 35 U.S.C. § 102

Within the Office Action, Claims 1-27 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Pub. No. 2006/0155400 to Loomis (“Loomis”). The Applicants respectfully disagree.

Loomis teaches an Internet based personalized radio, where a user has a pre-selected list of songs to be played in a particular order. Loomis also teaches pre-buffering the first ten seconds of each of the next several songs on the list so that, should the user choose to skip to any of the next several songs, the pre-buffered ten seconds of the target song is already available to be played. Loomis discloses a computer 120 for running an Internet Radio Client Application 109. A buffer 211 is used to store a pre-buffered portion of a number of songs on a user’s playlist. An initial buffering time 210 is needed to load the pre-buffered portion of a first song. The pre-buffered portion is only a portion of the song (10 seconds worth as disclosed in Loomis),

not the entire song. When a user requests a song that has been pre-buffered, the system starts reading the pre-buffered portion (first 10 seconds of the song S_5 for example) from the buffer 211 (Loomis, paragraph 0047). At the same time, the application 109 asks the server to transmit “the rest of S_5 to the buffer” (Loomis, paragraph 0047). Once the pre-buffered portion is read from the buffer 211, “a sufficient part of the rest of S_5 is already there [buffer] and is ready to be read” (Loomis, paragraph 0047). Paragraph 0065 of Loomis further specifies that the “rest of the target song” is downloaded, not the entire song. Loomis clearly teaches that the entire song S_5 is not streamed separately from the already pre-buffered portion, only the “rest of” the requested song is streamed. Loomis does not teach that the pre-buffered portion is pre-fetched and later streamed, and that the entire song, not just the remaining portion of the song, is later streamed to the buffer. Loomis teaches adding the remaining portion of the song to the already pre-fetched and pre-buffered portion of the song. Loomis does not teach transitioning from a pre-buffered portion of the song to an entire segment of the song.

Further, Loomis teaches a single buffer 211 for receiving both the pre-buffered portion of the song, and later, the remaining portion of the song. The remaining portion of the song is simply added to the end of the pre-buffered portion of the song in the buffer 211. Loomis does not teach a steam synchronizer that receives two separate data streams, a first data stream comprising a pre-buffered portion of the song received from a temporary storage cache and a second data stream comprising an entire segment of the song streamed from a stream buffer. Loomis also does not teach a component that synchronizes the two data streams, and that seamlessly transitions from the first data stream to the second data stream.

In contrast to the teachings of Loomis, the presently claimed invention is directed to methods and apparatuses for streaming content. The content is presented such that a delay time between requesting the content and utilizing the content is minimized. The identity of the user is detected and a preference is identified corresponding to the user. A content item is then selected based on the preference and an initial portion of the content is pre-fetched and stored in a temporary storage cache 330. When a request is received for the content item, the initial portion is streamed from the temporary storage cache 330 to a stream synchronizer 340. The stream synchronizer 340 outputs the received streaming initial portion as a resultant stream. While the resultant stream is output, the stream synchronizer 340 receives a second streaming input from a stream buffer 335, the second streaming input is the entire segment of the requested content item

(Present Specification, page 21, lines 14-19). The stream synchronizer 340 synchronizes the streaming initial portion received from the temporary storage cache 330 and the streaming entire segment received from the stream buffer 335 (Present Specification, page 21, lines 12-13). The resultant stream output from the stream synchronizer 340 is seamlessly transitioned from the streaming initial portion to the streaming entire segment of the content item (Present Specification, page 21, line 19 to page 20, line 8). As described above, Loomis teaches pre-buffering a first portion of a song in a buffer 211 and subsequently streaming a remaining portion of the song to the same buffer, where the remaining portion is added to the pre-buffered portion in the buffer when the song is played. Loomis does not teach pre-buffering a first portion of the song, subsequently streaming the entire song, and transitioning from streaming of the pre-buffered portion to streaming the entire song. Further, Loomis teaches a single buffer 211 for receiving the first portion of the song and for receiving the streaming remaining portion of the song. Loomis does not teach a temporary storage cache for storing the pre-buffered portion of the song, and a separate stream buffer for receiving the streaming entire song. Still further, Loomis does not teach a stream synchronizer that receives two separate data streams, a first data stream comprising the pre-buffered portion of the song and a second data stream comprising the entire song. Loomis also fails to teach a stream synchronizer that synchronizes the two data streams, and transitions an output resultant stream from the pre-buffered portion of the song to the entire song.

The independent Claim 1 is directed to a method comprising identifying a preference, selecting a content item based on the preference, storing an initial portion of the content item in a temporary storage cache, receiving a request for the content item, streaming the initial portion of the content item from the temporary storage cache to a stream synchronizer in response to the request, producing a resultant stream using the initial portion of the content item and seamlessly transitioning the resultant stream from the initial portion of the content item to an entire segment of the content item. As described above, Loomis does not teach seamlessly transitioning from an initial portion of a content item to an entire segment of the content item. For at least these reasons, the independent Claim 1 is allowable over the teachings of Loomis.

Claims 2-10 are all dependent upon the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Loomis. Accordingly, the Claims 2-10 are all also allowable as being dependent upon an allowable base claim.

The independent Claim 11 is directed to a system comprising means for identifying a preference, means for selecting a content item based on the preference, means for storing an initial portion of the content item in a temporary storage cache, means for receiving a request for the content item, means for streaming the initial portion of the content item from the temporary storage cache to a stream synchronizer in response to the request, means for producing a resultant stream using the initial portion of the content item and means for seamlessly transitioning the resultant stream from the initial portion of the content item to an entire segment of the content item. As described above, Loomis does not teach seamlessly transitioning from an initial portion of a content item to an entire segment of the content item. For at least these reasons, the independent Claim 11 is allowable over the teachings of Loomis.

The independent Claim 12 is directed to a method comprising storing an initial portion of a selected content item in a temporary storage cache, streaming the initial portion of the selected content item from the temporary storage cache to a stream synchronizer, simultaneously loading an entire segment of the selected content item to the stream synchronizer while streaming the initial portion, producing a resultant stream comprising the initial portion of the selected content item and seamlessly transitioning the resultant stream from the initial portion of the content item to the entire segment of the content item. As described above, Loomis does not teach seamlessly transitioning from an initial portion of a content item to an entire segment of the content item. For at least these reasons, the independent Claim 12 is allowable over the teachings of Loomis.

Claims 13-18 are all dependent upon the independent Claim 12. As discussed above, the independent Claim 12 is allowable over the teachings of Loomis. Accordingly, the Claims 13-18 are all also allowable as being dependent upon an allowable base claim.

The independent Claim 19 is directed to a system comprising means for storing an initial portion of a selected content item in a temporary storage cache, means for streaming the initial portion of the selected content item from the temporary storage cache to a stream synchronizer, means for simultaneously loading an entire segment of the selected content item to the stream synchronizer while streaming the initial portion, means for producing a resultant stream comprising the initial portion of the selected content item and means for seamlessly transitioning the resultant stream from the initial portion of the content item to the entire segment of the content item. As described above, Loomis does not teach seamlessly transitioning from an initial portion of a content item to an entire segment of the content item. For at least these reasons, the independent Claim 19 is allowable over the teachings of Loomis.

The independent Claim 20 is directed to a system comprising a media server configured for storing an entire segment of content, a client device configured for storing an initial portion of the content wherein the client device is configured to display the content by streaming a resultant stream from the initial portion of the content while simultaneously receiving the entire segment of the content and seamlessly substituting the entire segment of the content for the initial portion using a stream synchronizer. As described above, Loomis does not teach seamlessly transitioning from an initial portion of a content item to an entire segment of the content item. For at least these reasons, the independent Claim 20 is allowable over the teachings of Loomis.

Claims 21-26 are all dependent upon the independent Claim 20. As discussed above, the independent Claim 20 is allowable over the teachings of Loomis. Accordingly, the Claims 21-26 are all also allowable as being dependent upon an allowable base claim.

The independent Claim 27 is directed to a method comprising identifying a user, identifying a preference, generating a content list using the preference and the user, selecting a content item from the content list based on the preference, wherein the content item is a data file having a defined beginning point and ending point, prefetching an initial portion of the content item, storing the initial portion of the content item in a temporary storage cache, receiving a request for the content item, streaming the initial portion of the content item from the temporary storage cache to a stream synchronizer in response to the request, producing a resultant stream output from the stream synchronizer using the initial portion of the content item, streaming an entire segment of the content item to the stream synchronizer via a stream buffer while the initial portion of the content item is streaming to the stream synchronizer from the temporary storage cache, synchronizing the streaming initial portion of the content item and the streaming entire segment of the content item within the stream synchronizer, and seamlessly transitioning the resultant stream from the initial portion of the content item to the entire segment of the content item. As described above, Loomis does not teach seamlessly transitioning from an initial portion of a content item to an entire segment of the content item. Also, Loomis does not teach a stream synchronizer that receives two separate data streams, a first data stream comprising the initial portion of the content item and a second data stream comprising the entire segment of the content item. Further, Loomis does not teach a stream synchronizer that synchronizes the two received data streams and seamlessly transitions from the first data stream to the second data stream. For at least these reasons, the independent Claim 27 is allowable over the teachings of Loomis.

PATENT

Attorney Docket No.: SONY-29200

For the reasons given above, Applicants respectfully submit that all of the pending claims are now in condition for allowance, and allowance at an early date would be greatly appreciated. Should the Examiner have any questions or comments, they are encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,
HAVERSTOCK & OWENS LLP

Dated: March 22, 2010

By: /Jonathan O. Owens/
Jonathan O. Owens
Reg. No.: 37,902
Attorneys for Applicants